KERALA STATE COUNCIL FOR SCIENCE, TECHNOLOGY AND ENVIRONMENT

Engineering Support & Co-ordinated Research for Specially Talented children (ESCORT)

Guidelines

1. Introduction

The scheme, Engineering Support & Co-ordinated Research for Specially Talented children, is proposed to provide engineering and technological interventions to nurture and provide necessary support for the differentially abled children in Kerala. Students with impairment are likely to have more problems and difficulties in sensory, cognitive and psychiatric areas and also suffering in physical strength and other health-related challenges.

The scheme support projects to carryout research in the area of Technological Aspects in disability studies and provide necessary engineering oriented technical interventions to develop implements to aid and assist physically or mentally challenged children. Based on the recommendations of the Programme Advisory Committee (PAC), maximum research grant of Rs.10 lakh will be provided to the selected projects for a maximum duration of 2 years. The following guidelines assist for smooth implementation of the project in conformity with those terms and conditions.

2. Who can Apply?

- Scientists/ Researchers/Teachers from Academic Institutions (R&D centres, Universities, Colleges, Schools) in Kerala.
- Non- Governmental Organizations/Self-financing Institutions in the Kerala State who are involved in Science & technology activities (should have a minimum of 3yeras registration under the Right of Persons with Disabilities (RPwD) Act, 2016)
- Medical Professionals in the Kerala State who are involved in the research & development of medical devices and aids.
- Individual innovators (The applicant should possess a degree in Science/ Engineering or Diploma in Engineering) in Kerala. Prior experience in developing innovative projects will be an added advantage.

In the case of the projects from R&D Institutions/Departments of Universities, Government/ Aided Colleges/Schools in the Kerala State, the PI and Co-I shall have more than five years of service period left for superannuation at the time of submission of project proposal.

There should be a Co-I from the same Institution of PI.

3. Project Implementation

The project proposals under this Scheme are evaluated by the Programme Advisory Committee for ESCORT (PAC- ESCORT). Based on the recommendations of the Committee, financial grant not exceeding Rs. 10 lakhs will be provided for the project, for a maximum duration of two years. The financial support from KSCSTE primarily covers product/ prototype development, cost of process equipment or its fabrication/ development, test and evaluation of products, user trials etc.

In the case of individual innovators, a Tie-up Institution has to be identified for implementing the project and the applicant will be attached to that Tie-up institution for developing the proposed technology. The financial assistance will be released to the Tie-up institution, where the applicant intends to carry out the project. The tie-up institution can be any Research organization under the Govt. of Kerala or Govt. of India institutions working in Kerala or an Engineering/Academic institution affiliated to a University in Kerala (Polytechnic or Engineering Colleges/ University Departments & affiliated colleges).

In cases where the PI is from a Non-Governmental Organization, the institution should have a minimum of 3yeras registration under the *Right of Persons with Disabilities (RPwD) Act, 2016* and produce audited financial statements for the last 3 years along with the application for grant.

The project approved for implementation will be provided with financial sanction, subject to the terms and conditions laid down by the KSCSTE.

4. Time slot to apply

Project Proposals will be invited through notification in the website of KSCSTE, once in a year. The Proposals can be submitted through online only on notification and during the active time.

5. How to apply?

Proposals under this scheme shall be submitted online only. Proposals submitted in any other mode will not be considered and summarily rejected. The Principal Investigator shall also submit Endorsement from the implementing institution and Consent from the Investigators along with the project proposal. General Format of documents is available in the website.

6. Nature of Financial Support

The financial support from KSCSTE will be in the form of research/technology development grant which will be released on project year basis after reviewing the progress of the project in the previous year. Maximum grant of Rs.10 lakh will be provided which will be spread on a span of two years. The grant is exclusively for the stipulated research and does not include any civil construction or moveable or immovable properties. In addition, the implementing institution is eligible for an overhead @ 10% of total expenditure subject to a ceiling of Rs.50,000/-, on successful completion of the project and after settlement of the SE & UC. The budget heads covered in the research grant are as follows:

No.	Item	Guidelines
1.	Man Power –Salaries / Wages 1. Technical Assistant	Technical Assistant: @Rs. 19,000/- per month for candidates with Graduation/Diploma. Only skilled manpower as per the requirements of the project will be allowed (Please note that neither the PI nor the Co-I is eligible for any salary or honorarium from the project.)
2.	Equipment	PI shall submit budgetary quotation for the equipment to be purchased under the project.

3.	Consumables	It may include Testing and Lab charges, Fabrication
		charges and other laboratory consumables.
4.	Travel Expenses	Maximum Rs.20,000/- per year, relaxable in exceptional
		cases where the study involves extensive travel.
5.	Contingencies	Maximum Rs.20,000/- per year, relaxable in exceptional
		cases.
6.	Institutional Overhead	10% of total expenditure, subject to a ceiling of
		Rs.50,000/

7. Commercialisation Efforts

Tangible Research output with a new product/prototype having potential for commercialisation are expected. The efforts which will be made for commercialising the research output shall be clearly mentioned in the proposal. The other research output indicators are publications/patents.

8. Issuing Sanction Order

Based on the recommendations of the PAC and with the approval of the competent authority, Offer letter with the recommendations of PAC will be issued to the Principal Investigator/Co-Investigator of the approved project. The PI accepting the offer shall execute the Terms and Conditions (T&C) in the prescribed format in plane paper countersigned by the Head of the Institution/Tie-up Institution, in the case of Govt./Govt. Aided institutions and in a non-judicial stamp paper worth Rs.200/- countersigned by the Head of the Institution/Tie-up Institution, in the case of NGO/Self-financing Institutions/ Individual innovators.

- ➤ If the documents furnished by the PI are in order, Sanction Order will be issued. The Sanction Order includes breakup of funds allocated under the different heads like Equipment, Manpower, Travel, Consumables, Contingencies, etc. The total cost of the project will be finalised based on the latest quotation(s) of the equipments approved under the project and other relevant documents related to manpower, contingencies, etc. submitted by the Principal Investigator.
- ➤ Copies of the Sanction Order will be sent to the Principal Investigator (PI) and Head of the Institution (Principal/ Registrar/ Director/ Comptroller etc. as the case may be). Any correspondence with the KSCSTE regarding the project should invariably quote the file number as shown in the Acknowledgement and all correspondences should be addressed to the Director, KSCSTE. After issuing Sanction Order from KSCSTE, the Council will take steps to effect the payment electronically.
- ➤ The research grant for the project is released on the basis of yearly requirements taking note of the technical progress and expenditure incurred. The first Sanction Order indicates the budgetary allocation for the entire duration of the project under various heads like Equipment, Manpower, Travel, Consumables, Contingencies, Institutional Overheads, etc.
- ➤ Diversion of fund from Equipment, Manpower, etc., is normally not allowed. However, on genuine grounds, any reallocation/re-appropriation of grant under different heads may be considered based on the recommendation of PAC and with the approval of KSCSTE. The Equipments sanctioned in the project should be procured at the earliest to avoid any cost escalation. The PI and the implementing Institution should complete all formalities in advance for placing the order. There

should not be a break/ time gap in between the project period. The project has to be carried out continuously and it shall be completed on expiry of approved duration.

- ➤ The Institution shall not entrust the implementation of the work for which the grant is being sanctioned to another institution nor shall it divert the grant to other institution as assistance. In any case the Institution is not able to implement the project, it should refund the entire grant or the balance grant to KSCSTE at the earliest.
- Once the project is sanctioned, PI should furnish the following documents.
 - ✓ Date of start of the project in prescribed format.
 - ✓ Specifications of the equipments purchased.

9. Date of Start of the Project

The project becomes operative with effect from the date of Sanction Order or receipt of grant by the Implementing Institution. This date should be intimated to KSCSTE by the Institution authorities/ Principal Investigator. The date of start of the programme should in no case be later than one month after the receipt of the fund by the Institution.

10. Submission of Progress Reports

The Principal Investigator shall furnish Progress Reports on the activities of the project on a half yearly basis. Half yearly Progress Reports should be submitted with effect from the Date of start of the project. In addition, PI shall also submit Annual Progress Reports covering the details of entire work carried on project-year-basis within 1 month of completion of each project year.

11. Mid Term Project Evaluation

The Council organizes progress evaluation meetings periodically for keeping strict vigil on the progress of the project work by each PI. The Investigators should attend the review meeting since it provides an opportunity to get their project reviewed and any mid-term requests by the PIs for additional grant/ extension in duration etc. are considered by KSCSTE during the review. Subsequent release of grant would be based on the review and the recommendations of PAC. Descriptive evaluation will be carried out based on the following criteria;

- a) Is the project execution as per the projected timeline?
- b) Is there sufficient participation from each of the collaborators involved?
- c) Are the milestones achieved?
- d) Are there any specific bottlenecks that the PIs have identified?
- e) Are the alternate solutions to the bottlenecks/roadblocks projected?
- f) Does the proposal execution need a course correction?

PAC may recommend the continuation or termination of the project based on the progress made.

12. Periodic submission of SE & UC

➤ The Implementing Institution shall forward the audited financial statements - Utilization Certificate (UC) and Statement of Expenditure (SE) countersigned by the Head of the Institution to the effect that the grant has been utilized for the research work for which it was granted.

- ➤ Audited Utilization Certificate and Statement of Expenditure (audited by Accounts Officer in case of Government Institutions and audited by Chartered Accountant in case of Aided Institutions/ NGO/ Individual innovators) of the previous year in the prescribed format should be furnished within three months of completion of the project year calculated from the date of start of the project (This period will be referred to as the project year- I, II, III respectively w.e.f. the date of start of the project.) The project year I is calculated from the date of start of the project and not based on the financial year. [e.g., If the date of start of the project is 01.10.2021, the project year I will be from 01.10.2021 to 30.09.2022 and not from 01.10.2021 to 31.03.2022]
- ➤ The Implementing Institution will maintain separate audited accounts for the project. Any interest accrued should be reported to KSCSTE and should be reflected in the Statement of Expenditure.

13. Release of further instalment of Grant

- ➤ The subsequent instalment of grant would be released annually on the basis of expenditure incurred in the previous project year & expected expenditure in that year, based on the thorough midterm review and evaluation of progress and by the recommendation of PAC. Annual Progress Report and Audited Utilization Certificate and Statement of Expenditure of the previous year in the prescribed format (audited by Accounts Officer in case of Government Institutions and audited by Chartered Accountant in case of Aided Institutions/NGO/Individual innovators) including committed expenditure for the next year shall be forwarded through the Head of the Institution within 3 months of the completion of project year.
- ➤ However, any request for release of the next instalment should be accompanied by the following documents: a) Audited Utilization Certificate and Statement of Expenditure for the previous project year (in original) b) Latest authenticated Statement of Expenditure including Committed Expenditure and interest accrued if any and a detailed Annual Progress Report.
- ➤ If substantial funds are available after verifying the Utilization Certificate & Statement of Expenditure, amount will not be released. If the funds are nearing to be over during the middle of the year, a Statement of Expenditure should be submitted for the interim release of grant. The request for grant should however reach KSCSTE at least 30 days in advance.
- ➤ In the case of project duration exceeding one year, the unspent amount need not be refunded at the end of first or second year as the case may be, but the amount may be automatically adjusted towards the release of subsequent grants, unless or otherwise specified.
- ➤ The grant amount sanctioned for the Ist and IInd year should be utilized within the same project year and the unutilized portion of the grant amount should not be used without prior permission from the Council. Subsequent release of grant should be based on the yearly appropriation of the grant utilized for the purpose for which it was sanctioned.

14. Re-appropriation of Fund and Extension details

- ➤ Re-appropriation of fund within the total budget may be approved based on the recommendation of PAC. PI should submit request for re-appropriation in the prescribed format. However, reappropriation from manpower and equipment will not be normally allowed.
- ➤ The extension of duration of the project will not be granted normally. In exceptional cases where the work could not be completed within the stipulated time, PI should submit request for extension

in the prescribed format, six months before completing the tenure. The final decision will be based on the recommendations of PAC and/or with the approval of KSCSTE.

15. Conditions if the progress is not satisfactory

- > During the progress monitoring/ review, if the progress is not satisfactory, then the project will be terminated and the balance amount will not be released.
- KSCSTE reserves the right to terminate the project at any stage if it is convinced that the grant has not been properly utilised or appropriate progress is not being made. Also, the PI is liable to refund the grant amount in part or in full in case of unsatisfactory implementation of the project or unwillingness to co-operate with the Council for monitoring/evaluating the progress of the project.

16. Submission of Documents on Project Completion

On completion of the project, the PI through the Institution should send the following documents to KSCSTE to enable settlement of the accounts and project:

- ✓ 2 Copies of the Final Technical Report (FTR) in the prescribed format. (soft binding without using plastic material)
- ✓ One page abstract highlighting the outcome
- ✓ Soft Copy of FTR
- ✓ Soft copy of Project Completion Report (PCR)
- ✓ Consolidated audited Statement of Expenditure and Utilisation Certificate
- ✓ Asset Transfer Certificate in the prescribed format
- ✓ DD/Cheque for any unspent amount with the Institution in favour of the Member Secretary, KSCSTE.

The above documents must be submitted within 3 months of completion of the project.

The PIs who submit the FTR after 6 months of the completion of the project, shall not be considered for future support under any research scheme.

17. Guidelines for publication of results

- i) Investigators wishing to publish technical/ scientific papers based on the research work done under the project should acknowledge the assistance received from KSCSTE.
- ii) The Investigator(s) should not enter into collaboration with a foreign party (individual/ industry) without prior approval of KSCSTE.
- iii) Investigators are also requested to publish research papers emerging out of the project work in peer reviewed Journals.
- iv) If the results of research are to be legally protected, the results should not be published without action being taken to secure legal protection for the research results. In such cases, the legal rights shall be proportionately shared with KSCSTE, unless specified, as the case may be.
- v) The knowledge generated from the project will be the property of KSCSTE and should be properly acknowledged. Transfer of technology generated, applications for patents, etc., shall be done only in consultation with KSCSTE and as agreed upon by KSCSTE.

18. Guidelines for IP Output generated

Transfer of technology generated, applications for patents, etc., shall be done only in consultation with KSCSTE and as agreed upon by KSCSTE and the Implementing Institution.

19. Other necessary conditions

Principal Investigator (PI) & Co-Investigator(s) and the Implementing Institution

- ➤ The project team consists of the Principal Investigator, Co-Investigator(s) and the project personnel appointed as per the Sanction Order. There can be a Project Advisor also, if the PI wishes. The advisor shall be a senior fellow in the field with reputation and experience in handling such Projects. The PI has the primary responsibility of the implementation of the project. It is necessary to ensure that the project is carried out by the project team in a cohesive manner. Periodic meetings of the team are essential for this purpose.
- ➤ KSCSTE's name should be engraved or affixed permanently on all equipments / instruments procured and also in the fabricated ones under the ESCORT programme of KSCSTE like 'Procured under the ESCORT project sanctioned from KSCSTE'.
- ➤ In case of PIs who would be superannuating during the duration of the project, association of a "in-service" Co-Investigator should be ensured. On the superannuation of the PI, the Co-Investigator could be considered as the PI subject to the approval of the Head of the Institution and KSCSTE. In such cases, the Institution authorities should inform to KSCSTE, well in advance, about their "no objection" for providing the infrastructural facilities to the PI assigned for implementation of the project after his/her superannuation. However, it is suggested that the PI should ensure that the project term is well within the superannuation period. PI may apply accordingly for easy file handling.
- ➤ Having accepted the responsibility for the implementation of the project, the PI should be committed to implement the project over its duration and should have no plans to go on long leave.
- ➤ In case, the PI is shifting to another institution on new appointment/ transfer/ long term deputation, the project could be transferred to that institution with the mutual consent of both the institutions and of KSCSTE. Such requests for transfer of the project should be sent well in advance and should be accompanied with 'No Objection' certificates from both the institutions and the Endorsement Certificate from the new Institution.
- ➤ In case the PI leaves the project due to unforeseen circumstances, the Co-Investigator could be considered as the PI subject to the approval of the Head of the Institution and KSCSTE. Such a request should be sent well in advance along with a detailed bio-data of the Co-Investigator and with consent letter from PI and Head of the Institution.
- ➤ The PI as well as the implementing institution has the responsibility of informing KSCSTE about any change in the status of the PI/ Co-Investigator including relieving them on short term deputation for a continuous period of 3 months or more.
- ➤ The Implementing Institution has an important role to play and in consultation with KSCSTE should take steps to ensure successful completion of the project, before relieving the PI or make proper alternative arrangements for ensuring the successful completion of the project.
- ➤ PI should strictly adhere to the purchase procedures of the implementing institution for the purchase of equipment sanctioned for the project.
- > The implementing Institution should provide necessary infrastructure facilities which should be adequate for smooth implementation of the project.
- ➤ Normally only one project will be sanctioned to a Scientist/Researcher at a time by KSCSTE. The PI can submit further proposals only after the successful completion of the sanctioned

- project. In case of budget constraints, preference will be given to the projects which are applied for the first time.
- ➤ For permanent, semi-permanent or infrastructural assets acquired solely from the project grants, an audited record in the form of a register in the prescribed format shall be maintained by the Institution. The term "Assets" include (a) the immovable property acquired out of the grant; and (b) movable property of capital nature where the value exceeds Rs.5,000/-. The Institution is required to send to KSCSTE list of assets acquired from the grant. The grant shall not be utilised for construction of any building unless specific provision is made for this purpose in the Sanction Order.
- ➤ All the assets acquired from the grant shall be the property of KSCSTE and should not be disposed off or encumbered or utilised for any purpose other than those for which the grant had been sanctioned, without the prior sanction of KSCSTE.
- After completion/termination of the project, KSCSTE shall be free to sell or otherwise dispose off the assets which are the property of KSCSTE. The Institution shall render to the Government necessary facilities for arranging the sale of these assets. KSCSTE also has the discretion to gift the assets to the Institution or transfer them to any other Institution if it is considered appropriate and justified.

Selection of Project Staff

- ➤ The application to the position shall be invited on an open basis through advertisements and there shall be a selection committee constituted for the purpose.
- ➤ PI should furnish the details of the Project personnel recruited in the project along with a copy of Appointment Order. If a vacancy arises in the due course, details of new project personnel appointed should also be reported promptly.
- ➤ Project personnel will be eligible only for casual leave, as per rules of the institutions. PI may authorize participation by such staff in any scientific event in India or abroad which may be treated as on duty. Maternity leave as per Govt. of India instructions would be available to all categories.
- ➤ All the personnel appointed under the project, for the full/ part duration of the project, are to be treated as temporary employees and will be governed by the administrative rules/ service conditions of the implementing Institution. No reference on these issues should be made to KSCSTE and that KSCSTE will not be responsible for such appointments.
- ➤ The KSCSTE will have no liability, whatsoever, for the project staff after completion of the project duration and cannot make any claim either to the implementing institution or to KSCSTE for any type of appointment.
- ➤ Government Departments/Institutions/Agencies shall ensure that the above guidelines or guidelines issued by KSCSTE from time to time are followed in regard to the remuneration and the other benefits to the personnel engaged in the project.
